Street Centerline Information Product Description (IPD)

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Summary – Engineering

City engineers will use this information product (IP) to generate the annual Powell Bill map. This map must illustrate the location of all streets, as well as their type (asphalt, stone, unsurfaced, etc.). Also, the map must illustrate who maintains the street. An accurate name and length (in both feet and miles) is essential.

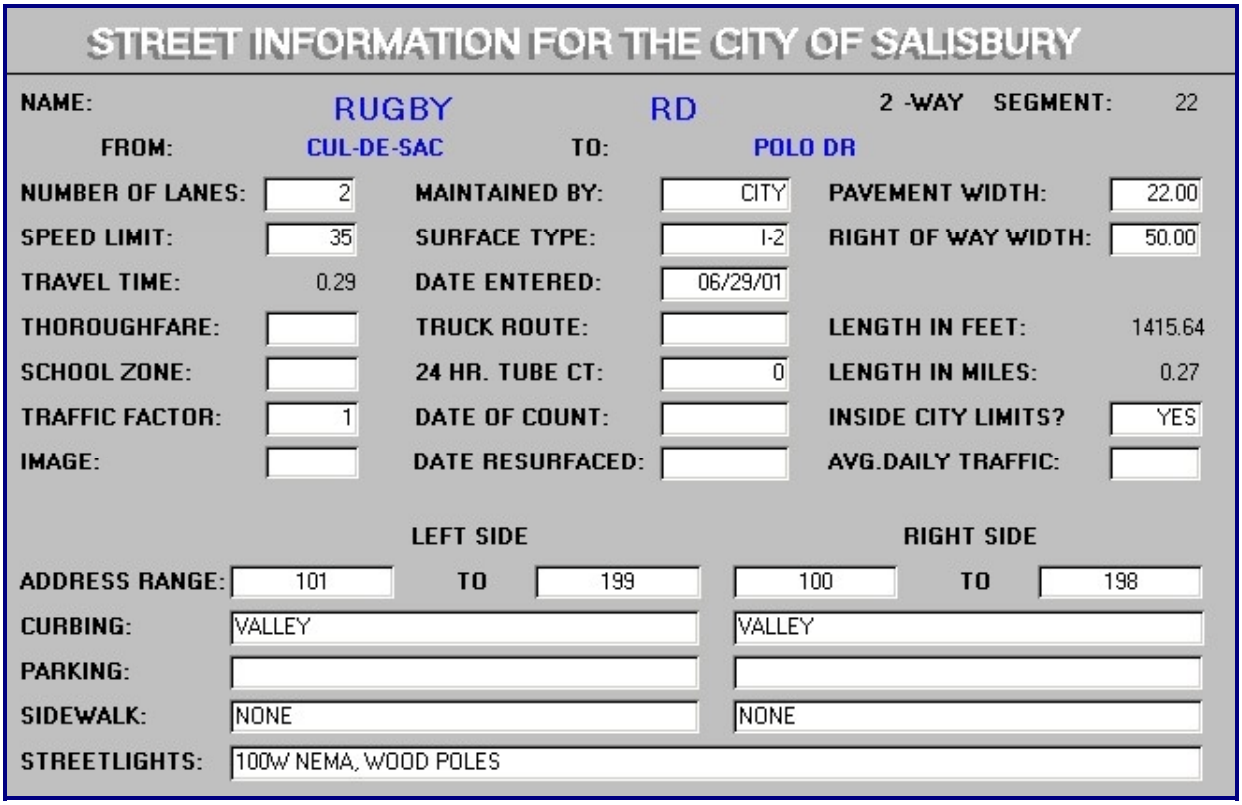
City engineers also use other data layers when generating the annual Powell Bill map. These data layers are used primarily for ease of readability, and include City limits and hydrology.

Another product commonly produced by City engineers is a 1:1000 scale street map. Additional data layers are used when generating this map. These data layers are used primarily for ease of readability, and include City limits, extra-territorial jurisdiction (ETJ), greenspace, parks, and hydrology.

Summary – Police (written by Kathryn Clifton)

The City crime analyst will use this IP for the purpose of address matching crime incidents and calls for service. Therefore, this data layer must have accurate street names and block ranges. Note: Police response areas include Community Park, which is outside of the City ETJ. Thus, this data layer must provide connectivity to this additional area.

Others who might use this IP (and should write a summary of their use) include: Fire, Transit, Streets, Public Works, Planning, etc. It will be important to understand what additional attributes they will need.



STREET INFORMATION FOR THE CITY OF SALISBURY

NAME:	RUGBY	RD	2 -WAY	SEGMENT:	22
FROM:	CUL-DE-SAC	TO:	POLO DR		
NUMBER OF LANES:	2	MAINTAINED BY:	CITY	PAVEMENT WIDTH:	22.00
SPEED LIMIT:	35	SURFACE TYPE:	I-2	RIGHT OF WAY WIDTH:	50.00
TRAVEL TIME:	0.29	DATE ENTERED:	06/29/01		
THOROUGHFARE:		TRUCK ROUTE:		LENGTH IN FEET:	1415.64
SCHOOL ZONE:		24 HR. TUBE CT:	0	LENGTH IN MILES:	0.27
TRAFFIC FACTOR:	1	DATE OF COUNT:		INSIDE CITY LIMITS?	YES
IMAGE:		DATE RESURFACED:		AVG.DAILY TRAFFIC:	

	LEFT SIDE			RIGHT SIDE		
ADDRESS RANGE:	101	TO	199	100	TO	198
CURBING:	VALLEY			VALLEY		
PARKING:						
SIDEWALK:	NONE			NONE		
STREETLIGHTS:	100W NEMA, WOOD POLES					

Sample screenshot of existing street information database layout.

Map Requirements

Map sketches will not be included here.

Maps using the street centerline IP are frequently created at different scales. The most commonly user scales are 1" = 400' and 1" = 1000'. As such, several considerations need to be taken into account:

1. Annotation/labeling must support these and other scales so that street names can easily be read. Note: The creation of annotation using the new ArcGIS family of products may not be necessary, as there are very nice labeling tools available. However, feature-linked annotation will be possible with the move to the geodatabase format.

2. Because maps are frequently created at different scales, there is often a need to show only major streets, etc. It would be beneficial to add/populate an attribute that categorizes streets as collectors, arterials, thoroughfares, etc. as defined by the City's Thoroughfare Plan.

3. ArcGIS provides an efficient means of changing symbology based upon attribute values – the creation of a layer file. A layer file references geographic data stored in a data source and defines how to display it. Thus, multiple layer files could be created for the same data source – categorizing streets by maintenance (unopen, city, state, etc.) or by thoroughfare category (collector, arterials, etc.) – to name a few.

4. It should be noted that ArcGIS contains predefined, standard symbols. The use of these standard symbols should be investigated.

List & Report Requirements

A typical report included in the annual Powell Bill submission includes the following items: street name, length (totaled by street name), type, and maintenance.

Additional reports required by other departments/divisions should be identified here as well.

Document & Image Requirements

At this time, there are no document and image requirements.

Error Tolerance

- ✓ Block range information must be correct.
- ✓ Street names, street suffixes, and lengths must also be correct (must be with 1/100 of a mile per mile for Powell Bill submission).
- ✓ Streets must be properly connected; the street network must be represented accurately.
- ✓ Streets must be shown in the correct place relative to orthophotography.
- ✓ Some streets are expected to not be properly aligned with property boundaries.